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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/206,971	12/08/1998	MITSUO SAKURAI	Q52075	6180

7590 03/05/2004

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2100 PENNSYLVANIA AVENUE N W
WASHINGTON, DC 200373202

EXAMINER

POON, KING Y

ART UNIT	PAPER NUMBER
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2624

DATE MAILED: 03/05/2004

23

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/206,971

Applicant(s)

SAKURAI, MITSUO

Examiner

King Y. Poon

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2003 and 31 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 and 27-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-25, 31-33 and 36-39 is/are allowed.
- 6) ☒ Claim(s) 27-30, 34 and 35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 February 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/31/2003 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 27-29, 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claims 27-29, 34 recite the limitation "an upper apparatus according to claim 26". There is insufficient antecedent basis for this limitation in the claim. Claim 26 has been cancelled.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 30, 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller (US 5,731,823) in view of Inouye et al (US 4,189,775).

Regarding claim 30: Miller teaches a computer/upper apparatus (host, column 4, lines 45-50) for a printing system for outputting image data (column 4, line 60) to be printed by a printer, that outputs high resolution raster data (66, fig. 3B, the processing step before 66, is processed in the host, column 4, lines 42-55) for a first image element (photograph, column 9, lines 30-40) include in a print image (fig. 2) and low resolution raster data (the halftone process of graphic region, column 9, lines 25-40, fig. 3A and 3B, that are processed by the host) for which halftoning has been processed for a second image element (graphic region, column 9, lines 25-40).

Miller does not teach the host outputs the high resolution raster data of the first image element of a print image and the low resolution raster data of the second image element that belongs to the same print image.

Miller, column 4, lines 60-68, teaches image elements, (for example, text is transmitted in bit map which is 64 of fig. 3A, and graphs 45, 46 are transmitted as geometric shape which is the image data before 60; fig. 3A), can be transmitted by the host at different processing stage of fig. 3A and fig. 3B, and the host can have any stage of fig. 3A and fig. 3B processed or not processed.

Since the high resolution raster data and low resolution raster data are data processed in different stage of fig. 3A and 3B, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Miller's

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upper apparatus to include: the host outputs the high resolution raster data (not processing step 68, fig. 3B) of the first image element of a print image and the low resolution raster data (processing 68 of fig. 3B) of the second image element that belongs to the same print image.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Miller's upper apparatus because it would have allowed the different elements of a print image to be processed by the host when the host is not busy and not to be processed by the host when the host is busy and thereby, reduces the time waiting to be processed for the print elements.

Miller still does not teach a compute readable medium for to store the program for the computer.

Inouye, in the same area of computer, teaches it is well-known in the art to have a compute readable medium for to store the program for the computer.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Miller to include: a compute readable medium for to store the program for the computer.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Miller by the teaching of Inouye because it would have prevented the program code from losing.

Regarding claim 35: Miller teaches wherein the second low resolution raster data for the second element is generated by performing a halftone process (68, fig. 3B) in the upper apparatus.

Allowable Subject Matter

7. Claims 1-25, 31-33, 36-39 are allowed.

Response to Arguments

8. Applicant's arguments filed on 11/24/2003 have been fully considered but they are not persuasive.

With respect to applicants argument that Miller does not teach Miller teach the host outputs the high resolution raster data of the first image element of a print image and the low resolution raster data of the second image element that belongs to the same print image, has been considered.

In reply: Miller does not teach the host outputs the high resolution raster data of the first image element of a print image and the low resolution raster data of the second image element that belongs to the same print image.

Miller, column 4, lines 60-68, teaches image elements, (for example, text is transmitted in bit map which is 64 of fig. 3A, and graphs 45, 46 are transmitted as geometric shape which is the image data before 60, fig. 3A), can be transmitted by the host at different processing stage of fig. 3A and fig. 3B, and the host can have any stage of fig. 3A and fig. 3B processed or not processed.

Since the high resolution raster data and low resolution raster data are data processed in different stage of fig. 3A and 3B, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Miller's

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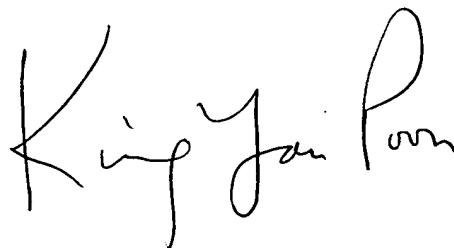
upper apparatus to include: the host outputs the high resolution raster data (not processing step 68, fig. 3B) of the first image element of a print image and the low resolution raster data (processing 68 of fig. 3B) of the second image element that belongs to the same print image.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Miller's upper apparatus because it would have allowed the different elements of a print image to be processed by the host when the host is not busy and not to be processed by the host when the host is busy and thereby, reduces the time waiting to be processed for the print elements.

Conclusion

1. Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is (703) 305-0892.

3/3/04

A handwritten signature in black ink that reads "King Y. Poon". The signature is written in a cursive, flowing style with a large initial 'K' and a distinct 'P'.